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EXAMINER
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NGUYEN, TU X

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/996,764

Applicant(s)

HONG ET AL.

Examiner

Tu X Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-45 is/are pending in the application.  
4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3 and 6-45 is/are rejected.  
7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

In view of the Amendment filed on 8/17/06, have been considered but are persuasive.

In response to Applicant argument "According to page 2 of the outstanding Office Action, the Examiner disagrees with the applicants' position that the addition of the auxiliary memory of Sawada would be redundant and that, therefore, it is unclear why anyone skilled in the art would conclude that the suggested modification of Alberth would be beneficial. In support of this position, the Examiner notes that Sawada discloses a detachable memory that can protect data stored in the semiconductor memories of the IC card of Alberth. The Examiner further notes that while Alberth lacks a teaching of a detachable memory, Sawada makes up for the deficiency. Thus, it is the applicants' position that the central issue in question remains unresolved. That is, regardless of whether Sawada provides a teaching of a detachable memory that is not included in the reference to Alberth, it is unclear that the suggested modification of Alberth would be beneficial since Alberth provides no indication that a detachable memory is necessary for its operation. As such, it is unclear that the suggested combination is proper or that the claimed invention would have been obvious". The Examiner respectfully disagrees, Sawada et al. teaching a detachable memory for many purposes such as a battery pack includes a music play-back device, the wireless telephone set itself can be reduced in size (as suggested by Sawada, col.2 lines 10-12).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-10, 14-15, 17-18, 20, 22-24, 31-34, 38-39 and 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth, Jr. et al. (US Patent 6,021,332) in view of Sawada et al. (US Patent 6,810,274).

Regarding claims 1, 8, 15, 22 and 44, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and  
one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4).

Alberth, Jr. et al. fail to disclose a detachable auxiliary memory.

Sawada et al. disclose a detachable auxiliary memory (see 3, fig.5 and col.4 lines 19-25). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see col.2 lines 10-12).

Regarding claims 2 and 20, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and  
one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4),

Alberth fails to disclose detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose detachable auxiliary memory (see 3, fig.2) a secondary power output connector to connect to and power a controller of another device (see col.2 lines 10-12, connector is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide the battery pack and the wireless telephone set can protect data stored in the semiconductor memory, as suggested by Sawada (see col.1 lines 64-65).

Regarding claim 9, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and  
one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405,

fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4),

Alberth fails to disclose detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose detachable auxiliary memory (see 3, fig.2) a secondary power output port to connect to and power a controller of another device (see col.2 lines 10-12, output port is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide the battery pack and the wireless telephone set can protect data stored in the semiconductor memory, as suggested by Sawada (see col.1 lines 64-65).

The modified Alberth, Jr. et al. disclose the first and second battery units are each detachable (see Alberth, col.8 lines 40-41) and further comprises a primary power connection to connect to and power a controller of the electronic device (see Alberth 424, 306; fig.4) and a secondary power output port to connect to a power a controller of another device (see Sawada, col.2 lines 1-9).

Regarding claim 31, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and

one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405,

fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

Alberth, Jr. et al. fail to disclose a detachable auxiliary memory.

Sawada et al. disclose a detachable auxiliary memory (see 3, fig.5 and col.4 lines 19-25). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see conl.1 lines 19-20).

The modified Alberth discloses forming a communication pathway (see Sawada, 18, fig.4) to transfer information between the electronic device and the built in memory unit when the removable memory unit is removed, it the electronic is connected to the second battery.

Regarding claims 3 and 10, the modified Alberth comprises a primary communication connection to connect to said electronic device (see Sawada, 39, fig.8), and a communication port to connect to memory unit to another device to exchange information with the another device (see Sawada, 44, 38, fig.8, col.2 lines 1-2).

Regarding claims 7 and 14, the modified Alberth et al. disclose the main memory is one of a memory chip and a memory card, and the auxiliary memory is the other of the memory chip and the memory card (see Sawada col.3 lines 27-39).

Regarding claim 17, the modified Alberth et al. disclose said electronic device retrieves data over a network (see Alberth, 301, 324, fig.3) and stores the retrieved data in the built in memory unit.

Regarding claims 18 and 23-24, the modified Alberth, Jr. et al. disclose the built-in memory comprises a basic recording capacity for the memory, and the removable memory comprises an increased recording capacity in addition to the basic recording capacity such that the electronic device stores the information independent of whether the auxiliary memory is connected to the battery (see Sawada, col.3 lines 1-2, 29-40).

Regarding claim 32, the modified Alberth, Jr. et al. disclose forming an energy pathway to supply the energy stored in the battery unit to the electronic apparatus while the communication pathway is formed (see Alberth, 448, 427, fig.4).

Regarding claims 33, the modified Alberth et al. disclose connecting another electronic apparatus to the battery (see Sawada, col.2 lines 1-2) and forming another communication pathway between the another electronic apparatus and the one memory unit to transfer information between the one memory unit and the another electronic apparatus (see 45, 44, 3 fig.22).

Regarding claim 38, the modified Alberth et al. disclose detaching the battery from the electronic apparatus and connecting the electronic apparatus to another battery (see Alberth, col.8 lines 40-44).

Regarding claim 39, the modified Alberth et al. disclose another battery includes another memory unit (see Alberth, 402, 410, fig.5).

Regarding claim 34, the modified Alberth et al. disclose both the electronic apparatus and the another electronic apparatus are connected to the battery at the same time (see Sawada, 38, 41, 31 fig.8).



Claims 16 and 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al., in view of Sawada and further in view of Wang (US Pub. 2003/0013506).

Regarding claim 16, the modified Alberth et al. fail to disclose said electronic device comprise a computer.

Wang disclose said electronic device comprise a computer (see 22, 23, fig.16). therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Wang order to provide the same battery is used for different type of electronic device.

Regarding claim 40, the modified Alberth fails to disclose the another battery does not include another memory unit.

Wang discloses the another battery does not include another memory unit (see 22, fig.8). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Wang in order to provide the batteries are swappable.

Claims 6, 13 and 41-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth, Jr. et al. (US Patent 6,021,332) in view of Sawada et al. (US Patent 6,810,274) and further in view of Miyahshita (US Patent 6,244,894).

Regarding claims 6 and 13, the modified Alberth, Jr. et al. fail to disclose the main memory is detachable from the memory unit.

Miyahshita disclose the main memory is detachable from the memory unit (see col.7 lines 5-14, col.8 lines 1-7). Therefore, It would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Miyahshita in order provide compatibility and scalability for the mobile phone.

Regarding claims 41-42, the modified Alberth, Jr. et al. fail to disclose forming another communication pathway such that a detachable one of the memory units is accessible by the electronic apparatus.

Miyahshita disclose forming another communication pathway such that a detachable one of the memory units is accessible by the electronic apparatus (see 13, fig.8). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Miyahshita in order provide compatibility and scalability for the mobile phone.

Regarding claim 43, the modified Alberth disclose the detachable memory unit prior to said attaching the detachable memory unit to the battery (see Miyahshita, 41, fig.8).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth et al., in view of Sawada, in view of Austin et al. (US Patent 6,590,303) and further in view of Griffith et al. (US Patent 6,917,280).

Regarding claim 12, Alberth et al. disclose a first and second selectively interchangeable (see col.8 lines 40-42) battery units to store power for the electronic device.

Alberth et al. fail to disclose an auxiliary memory that is detachable from said second battery unit, a secondary communication port to connect said memory unit to another device and the communication port is disposed to be flipped out from a body.

Sawada discloses an auxiliary memory that is detachable (see col.1 lines 55-56). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the system of Alberth with the above teaching of Sawada in order to provide additional memory for the mobile device.

Austin et al. disclose a communication port between the battery and another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Griffith et al. disclose communication port is disposed to be flipped out from a body (col.7 lines 31-32). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth et al. with the above teaching of Griffith et al. in order to provide a micro-size connector to conserve space.

Claims 11, 25-30 and 35-37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth et al., in view of Sawada and further in view of Austin et al. (US Patent 6,590,303).

Regarding claim 26, Alberth et al. disclose a first and second selectively interchangeable (see col.8 lines 40-42) battery units to store power for the electronic device.

Alberth et al. fail to disclose an auxiliary memory that is detachable from said second battery unit, a secondary communication port to connect said memory unit to another device.

Sawada discloses an auxiliary memory that is detachable (see col.1 lines 55-56). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide additional memory for the mobile device.

Austin et al. disclose a communication port between the battery and another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Regarding claims 11, 25, 27 and 35-37, Alberth et al. fail to disclose said secondary communication port protrudes form the battery to connect to another device.

Austin et al. disclose said secondary communication port protrudes form the battery to connect to another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Regarding claim 28, the modified Alberth et al. fail disclose a printed circuit board to connect said memory to said communication port. The Examiner takes an Official notice is taken that the concept a printed circuit board for connection between memory and communication port is well known in the art. It would have been obvious a circuit board is useful for interconnection with multiple electronic components.

Regarding claim 29, the modified Alberth discloses the one memory unit comprises a recordable medium housed in a case (see Sawada, fig.8).

Regarding claim 30, the modified Alberth et al. disclose the main memory is one of a memory chip and a memory card, and the auxiliary memory is the other of the memory chip and the memory card (see Sawada col.3 lines 27-39).

Claims 19 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US Pub. 2003/0013506) in view of Sawada et al. (US Patent 6,810,274).

Regarding claim 19, Wang discloses an electronic apparatus comprising:

an electronic device (see 41, fig.16); and

a first and second selectively interchangeable batteries (22, 23, fig.16) coupled to said electronic device.

Alberth, Jr. et al. fail to disclose said battery includes a memory unit having a built-in main memory, and the detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose said battery includes a memory unit having a built-in main memory (see 42, 43 fig.8.), detachable auxiliary memory (see 3, fig.2) a secondary power output connector to connect to and power a controller of another device (see col.2 lines 10-12, connector is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Wang with the above teaching of Sawada order to provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see conl.1 lines 19-20).

Regarding claim 21, the modified Alberth, Jr. et al. discloses said battery includes a connector through which a controller of another electronic device is powered by said battery, wherein said battery is attached to said electronic device when the another electronic device is connected to one of the connector and the communication port (see Sawada, col.2 lines 1-2,

the music play back device is inherent internally connected to the battery pack, since the claims does not clarify whether the connector is external or internal connector).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 45 is rejected under 35 U.S.C. 102(e) as being anticipated by Miyashita (US Patent 6,244,894).

Regarding claim 45, Miyashita discloses an electronic device comprising a body and a battery that is removably coupled to the body to supply current to the body and to provide storage for information for the electronic device, the battery comprising:

a built-in and detachable semi-conductor memory chip (see col.4 lines 11-17) having an initial recording capacity on which the information is recorded (see col.2 lines 35-44);


a fixed block to which the main memory is detachably attached (see fig.8, element 22);  
a detachable auxiliary memory card to expand the recording capacity (see fig.8, element 40), if necessary ("if" is an option, there is no need for consider "according to a predetermined capacity requirement of the information"); and a slot into which the detachable auxiliary memory card is removably inserted (see fig.8, element 23).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



October 26, 2006